Supreme Court, U.S.
FILED

02 257 AUG 1 4 2002

OFFICE OF THE CLERK

No. 02-

IN THE

Supreme Court of the United States

ANNA LLOYD,

Petitioner,

v.

AMERICAN AIRLINES, INC.,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

JAMES PHILLIP MALCOM
Counsel of Record
ROBERT S. SHAFER
CLIFFORD W. PLUNKETT
FRIDAY, ELDREDGE & CLARK, LLP
Attorneys for Petitioner
2000 Regions Center
400 West Capitol Avenue
Little Rock, AR 72201-3493
(501) 376-2011

175639

COUNSEL PRESS
(800) 274-3321 • (800) 359-6859

QUESTION PRESENTED

Whether a passenger suing an air carrier under the Warsaw Convention can recover for mental injuries that are accompanied by physical injuries.

TABLE OF CONTENTS

	Page
Question Presented	i
Table of Contents	ii
Table of Cited Authorities	iii
Table of Appendices	iv
Opinions Below	1
Statement of Jurisdiction	1
Treaty Provision Involved	1
Statement of the Case	2
Reasons for Granting the Writ	5
I. The Question Presented Was Reserved In *Floyd* And Completes The Basic Framework For Recovery Of Damages For Mental Injuries In Warsaw Convention Cases	6
II. The Opinion Below Conflicts With *Zicherman*	7
Conclusion	13

TABLE OF CITED AUTHORITIES

Page

Cases:

Arkansas Motor Coaches v. Whitlock, 199 Ark. 820, 136 S.W.2d 184 (1940) 9

Eastern Airlines, Inc. v. Floyd, 499 U.S. 530 (1991) 5, 6, 7, 9, 10

El Al Israel Airlines, Ltd. v. Tseng, 525 U.S. 155 (1999) 5, 6, 7, 8

In re Air Crash at Little Rock, Ark., on June 1, 1999, 118 F. Supp.2d 916 (E.D. Ark. 2000) 12

Maddox v. American Airlines, Inc., 2002 WL 1765920 (8th Cir. Aug. 1, 2002) 10

Zicherman v. Korean Airlines Co., 516 U.S. 217 (1996) ..... *passim*

Statute:

28 U.S.C. § 1254(1) 1

28 U.S.C. § 1331 3

28 U.S.C. § 1332 3

46 U.S.C. App. § 761, *et seq.* 8

Cited Authorities

Page

Article 17 of the Convention for the Unification of Certain Rules Relating to International Transportation by Air, Oct. 12, 1929, 49 Stat. 3000, T.S. No. 876 (1934), *reprinted in note following* 49 U.S.C. § 40105 ("Warsaw Convention" or "Convention") ..... *passim*

TABLE OF APPENDICES

Page

Opinion Of The United States Court Of Appeals For The Eighth Circuit, Filed May 29, 2002, Corrected June 20, 2002 ..... 1a

Opinion And Order Of The United States District Court For The Eastern District Of Arkansas, Filed October 27, 2000 ..... 26a

Petitioner Anna Lloyd ("Lloyd") respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Eighth Circuit, conditionally affirming in part, subject to remittitur, and reversing in part, a judgment obtained by Lloyd against Respondent American Airlines, Inc. ("American").

OPINIONS BELOW

The opinion of the court of appeals is reported at 291 F.3d 503. App. 1a. The opinion and order of the district court is reported at 118 F. Supp. 2d 916. App. 26a.

STATEMENT OF JURISDICTION

The court of appeals entered its judgment on May 29, 2002, as corrected on June 20, 2002. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

TREATY PROVISION INVOLVED

Article 17 of the Convention for the Unification of Certain Rules Relating to International Transportation by Air, Oct. 12, 1929, 49 Stat. 3000, T.S. No. 876 (1934), *reprinted in note following* 49 U.S.C. § 40105 ("Warsaw Convention" or "Convention"), provides:

> The carrier shall be liable for damage sustained in the event of the death or wounding of a passenger or any other bodily injury suffered by a passenger, if the accident which caused the damage so sustained took place on board the aircraft or in the course of any of the operations of embarking or disembarking.

STATEMENT OF THE CASE

Lloyd was a member of a college choir returning home from an overseas mission trip on American Flight 1420 from Dallas, Texas to Little Rock, Arkansas on the evening of June 1, 1999. The plane crashed and burst into flames while attempting to land at the Little Rock Airport during a thunderstorm. The pilot and ten passengers were killed, including two of Lloyd's friends.

Lloyd was seated in the rear of the plane. Upon impact, the seats separated from the floor and toppled forward, stacking on top of each other. Lloyd's calf was punctured by a metal seat support and her knee was injured. The plane was dark except for the light of the flames, and Lloyd could hear people screaming and the sound of things burning. Lloyd joined a crowd of passengers frantically moving toward the back of the plane where there was an emergency door. When the stewardess could not get the emergency door open, she ordered the passengers to go forward toward the fire and smoke, saying, "Don't trap me back here." Lloyd moved forward, but was met by crushing black smoke. She fell to the floor of the plane with her dress pulled over her face trying to breathe. Believing that she was going to die, she cried out, "Oh, God, please save me." (T. 340-345, 351)

The passengers were panicked and were pushing and shoving. There was not enough fresh air for all of them to breathe. When some men finally forced an opening in the rear emergency door, the stewardess was the first one to go out through the exit, leaving Lloyd and the other passengers behind. Crouching down, Lloyd squeezed through the opening and fell five or six feet from the plane, face first, into mud, rocks and water. She feared that she had fallen

into the Arkansas River. In darkness, hail and a driving rain, she waded through swampy ground away from the plane. Seeing her friend, Kristen Maddox, who was kneeling in the water with her hands raised in the air, Lloyd took her friend by the hands and pulled her to safety. Lloyd thought that her friend was holding wet tissue paper, but it was the skin from her burned hands. Lloyd fell to her knees with her face turned upward, "wailing like a wounded animal." (T. 180-181, 344-350)

In the crash Lloyd suffered smoke inhalation and vomiting, a traumatic injury to her knee, and a puncture wound to her calf, which left permanent scarring. At the crash site she was unable to function or to respond to questions. After the accident Lloyd suffered panic attacks, flashbacks and other symptoms of emotional or mental disorder. In March, 2000, psychiatrist Dr. Stuart Harris diagnosed Lloyd with chronic post-traumatic stress disorder ("PTSD") and major depressive disorder. According to Dr. Harris, Lloyd was "far more severely damaged and more severely impaired" than any of the other passengers he treated from Flight 1420 and would never be gainfully employed as a music teacher, which she was studying to be, or in any minimum wage job due to the severity of her condition. (T. 181-182, 413, 417-418)

Lloyd sued American in the United States District Court for the Eastern District of Arkansas, alleging a right to recover damages for her personal injuries under the Warsaw Convention and federal jurisdiction under 28 U.S.C. §§ 1331 and 1332. The jury returned a verdict of $6.5 million, on which the district court entered judgment.

Dr. Harris testified that Lloyd's physical injuries were "a factor" and "part of the process" that caused her PTSD. He described her physical and mental injuries as inseparable, asking, "How can you separate the knee from the horror of thinking you're going to be burned to death?" He further stated that "the crash and the experience" caused Lloyd's PTSD, even though he stated that she would have had PTSD even if she had not injured her calf and knee.[1] (T. 425, 470-472).

The court of appeals held that "damages for mental injury must proximately flow from physical injuries caused by the accident" in order to be compensable under the Convention. App. 11a. Applying the "flowing from" rule to the facts of the case, the court further held (i) that Lloyd could recover "only emotional damages which flow from the injuries to her legs and the smoke inhalation," and (ii) that the evidence was insufficient to establish "a $6.5 million connection between her relatively insignificant physical injuries and her very significant PTSD and depression." App 12a. Since the evidence supported some nexus between Lloyd's physical injuries and her mental injuries, the court ordered a remittitur of $1.5 million, or in the alternative, a new trial. App. 15a-16a.

---

1. Although Dr. Harris testified that Lloyd's PTSD is a physical injury to her brain which caused a change in brain function (T. 395, 425-426), Lloyd does not seek review of the judgment of the court of appeals on this basis. The question presented assumes that Lloyd's PTSD is a mental injury.

REASONS FOR GRANTING THE WRIT

The petition should be granted for two reasons. First, the question presented was reserved by the Court in *Eastern Airlines, Inc. v. Floyd*, 499 U.S. 530 (1991). Review of the question presented will complete the basic framework for recovery of damages for mental injuries in international air travel begun by the Court in *Floyd* (holding that a passenger cannot recover for mental injuries alone under Article 17 of the Convention) and continued in *El Al Israel Airlines, Ltd. v. Tseng*, 525 U.S. 155 (1999) (holding that the Convention provides the exclusive remedy for personal injuries suffered by passengers in international air travel).

Second, the court of appeals' construction of a "flowing from" rule that imposes an additional causation requirement for the recovery of damages for mental injuries after the conditions of liability under the Convention have been satisfied has no basis in the domestic law of compensatory damages that applies to this case, in direct conflict with *Zicherman v. Korean Airlines Co.*, 516 U.S. 217 (1996). *Zicherman* prohibits the courts from creating rules with regard to what harms are compensable under Article 17. Under *Zicherman*, the federal courts must "leave to domestic law (the local law identified by the forum under its choice-of-law rules or approaches) determination of compensatory damages available to the suitor." 525 U.S. at 170 (italics and parentheses in original).

I. The Question Presented Was Reserved In *Floyd* And Completes The Basic Framework For Recovery Of Damages For Mental Injuries In Warsaw Convention Cases

In *Eastern Airlines, Inc. v. Floyd*, 499 U.S. 530, 552 (1991), the Court held that damages for mental injuries are not recoverable under Article 17 of the Convention "when an accident has not caused a passenger to suffer death, physical injury or physical manifestation of injury." The Court then reserved decision on the question presented here, stating:

> Although Article 17 renders air carriers liable for "damage sustained in the event of" . . . such injuries, . . . we express no view as to whether passengers can recover for mental injuries that are *accompanied by* physical injuries. That issue is not presented here because respondents do not allege physical injury or physical manifestation of injury.

499 U.S. at 552-553 (italics added).

The Court also reserved decision in *Floyd* on the question whether the Convention "provides the exclusive cause of action for injuries sustained during international air transportation." *Id.* at 553.

In *El Al Israel Airlines, Ltd. v. Tseng*, 525 U.S. 155 (1999), the Court answered the second question reserved in *Floyd*. The Court held that in cases governed by Article 17, i.e., for personal injuries suffered "on board the aircraft or in the course of any of the operations of embarking or

disembarking," Art. 17, 49 Stat. 3018, the Convention "precludes a passenger from maintaining an action for personal injury damages under local law." 525 U.S. at 176. Since the passenger in *Tseng* suffered only psychic or psychosomatic injuries, (i) she could not recover under Article 17 of the Convention, as interpreted by *Floyd*, because she had no physical injuries, and (ii) she could not maintain an action under New York tort law, under the holding in *Tseng*, because Article 17 provided the exclusive remedy.

This petition addresses the first of two questions reserved in *Floyd*, whether mental injuries accompanied by physical injuries are compensable. In light of *Tseng*, it is settled law that the Convention provides the exclusive remedy for recovery of damages for mental injuries suffered in international air travel. Since mental injuries alone are not compensable under *Floyd*, whether such injuries are compensable under Article 17 when accompanied by physical injuries is a question of vital importance to all international passengers and merits review. Determination of the question presented will complete the basic framework for the recovery of such damages by answering the question reserved in *Floyd* and by applying the Court's holding in *Zicherman*.

II. The Opinion Below Conflicts With *Zicherman*

Lloyd argued in the court of appeals that the question presented was controlled by *Zicherman v. Korean Airlines Co.*, 516 U.S. 217 (1996). In *Zicherman* the petitioners sought loss-of-society damages for the death of a relative in an accident over the high seas. The Court held that the Convention allowed recovery for "legally cognizable harm, but that Article 17 leaves it to adjudicating courts to specify what harm is cognizable." 516 U.S. at 224 (quotation marks omitted). The Court explained that the Convention "leave[s]

the specification of what harm is legally cognizable to the domestic law applicable under the forum's choice-of-law rules." *Id.* at 231.

Applying these rules, the Court found that where an airplane crash occurs on the high seas, the substantive United States law is supplied by the Death on the High Seas Act, 46 U.S.C. App. § 761, *et seq.* ("DOHSA"). 516 U.S. at 231. The Court concluded that the petitioners in *Zicherman* could not recover loss-of-society damages, not because Article 17 by its own force either barred or limited the respondent air carrier's liability, but because DOHSA does not allow for the recovery of loss-of-society damages. *Id.* at 230-231.

The importance of *Zicherman* to the question presented was confirmed by the Court in *Tseng* in two significant ways. First, as noted above, the Court held in *Tseng* that the Convention provides the exclusive remedy for personal injuries suffered by passengers in international air travel. Thus, the availability of a remedy for such injuries was narrowed by *Tseng* to the domestic law identified in *Zicherman*.

Second, *Tseng* restated the holding of *Zicherman* in words that should dispose of the question presented in this case, stating, "*Zicherman* determined that Warsaw drafters intended to resolve *whether there is liability*, but to leave to domestic law (the local law identified by the forum under its choice-of-law rules or approaches) determination of the compensatory damages available to the suitor." 525 U.S. at 170 (italics and parentheses in original).

Lloyd argued below that she met the conditions for liability under Article 17, since she suffered physical injuries

to her calf and knee from an accident in the course of international air travel.[2] *See Floyd*, 499 U.S. at 535-536. Therefore, her right to recover for her PTSD and major depressive disorder was to be determined by the domestic law of Arkansas under a *Zicherman* choice-of-law analysis.[3] Arkansas law does not recognize the "flowing from" rule adopted by the court of appeals. The law in Arkansas is that damages for mental injuries are recoverable under Arkansas law when they are "accompanied by" a physical injury, whether actual or constructive. *Arkansas Motor Coaches v. Whitlock*, 199 Ark. 820, 136 S.W.2d 184, 186 (1940) (stating that "recovery of damages to compensate for mental anguish *unaccompanied by* actual or constructive physical injury cannot be had, however, the rule is different where there is physical injury *accompanying* the mental anguish" (italics added)).[4] Therefore, Lloyd's claim for damages for her PTSD and major depressive disorder was properly submitted to the jury.

---

2. The court of appeals agreed that Lloyd "[c]learly . . . suffered compensable physical injuries" under the Convention. App. 15a.

3. American did not dispute below "that a *Zicherman* choice-of-law analysis pointed to Arkansas damages law," arguing instead that an air carrier is liable to compensate mental injuries under Article 17 only to the extent that they "flow from" a physical injury. (Appellant's Reply Brief at 4)

4. The question reserved by the Court in *Eastern Airlines v. Floyd*, 499 U.S. 530 (1991), ". . . we express no view as to whether passengers can recover for mental injuries that are *accompanied by* physical injuries," is answered by Arkansas law, which provides for recovery of mental injuries accompanied by physical injuries. 499 U.S. at 552 (italics added).

Despite Lloyd's arguments and authorities to the court of appeals (Appellee's Brief at 15-16, 19), the court of appeals ignored *Zicherman* and failed to distinguish or even to cite *Zicherman* in its opinion.[5] Instead, relying upon some federal district court opinions and its own interpretation of the Convention in light of *Floyd*, but without any cited textual support in Article 17 or other provisions of the Convention, the court of appeals adopted the "flowing from" rule urged by American. App. 8a. The "flowing from" rule ignores the applicable Arkansas domestic law and imposes an additional causation requirement upon Article 17 that, so far as Lloyd knows, does not represent the domestic law of *any* jurisdiction.

The "flowing from" rule created by the court of appeals runs directly counter to *Zicherman*. Indeed, the petitioners in *Zicherman* saw that their claim for loss-of-society damages might be denied under either the general maritime law applied

---

5. In *Maddox v. American Airlines, Inc.*, 2002 WL 1765920 (8th Cir. Aug. 1, 2002), a case stemming from the same American Airlines plane crash, which was orally argued the same day as *Lloyd*, Lloyd's co-passenger and friend, Kristin Maddox, appealed the district court's denial of prejudgment interest on an $11 million jury award. The same judicial panel of the court of appeals that decided *Lloyd* held that the issue of prejudgment interest is governed by the domestic law applicable under Arkansas's choice-of-law rules. 2002 WL 1765920, at *4. *Maddox* relies upon the identical passages in *Zicherman* that Lloyd cited to the court of appeals in support of her argument that Arkansas law, not the "flowing from" rule, governs the issue whether her mental injuries are compensable. *Id.* at *2-3. In light of *Maddox*, the *Lloyd* decision's complete disregard of *Zicherman* and its refusal to allow Lloyd her right to full compensation for her injuries under Arkansas law is all the more glaring and inexplicable.

by the Second Circuit, or under DOHSA, as proposed by the respondent air carrier. They therefore urged the Court to craft a federal rule of damages that would be applicable in all suits brought under the Convention. 516 U.S. at 230. The Court rejected this approach. *Id.* at 230-231. In words written to explain the Court's rejection of general maritime law as the rule of decision, but equally applicable to other approaches for dictating compensatory damages under the Convention, the Court stated:

> [T]he Convention itself contains no rule of law governing the present question; nor does it empower us to develop some common-law rule — under cover of general admiralty law or otherwise — that will supersede the normal federal disposition. Congress may choose to enact special provisions applicable to Warsaw Convention cases, as some countries have done. *Absent such legislation, however, Articles 17 and 24(2) provide nothing more than a pass-through, authorizing us to apply the law that would govern in the absence of the Warsaw Convention.*

516 U.S. at 229 (italics added; citations omitted).

The Convention contains no "flowing from" rule to govern or limit the recovery of damages for Lloyd's PTSD and major depressive disorder, nor was the court of appeals empowered to create one. The "flowing from" rule, if allowed to stand, will deny international passengers like Lloyd the same right to recover for mental injuries accompanied by physical injuries that domestic passengers are entitled to

recover under Arkansas law[6] or the laws of their respective jurisdictions. If the "flowing from" rule adopted by the court of appeals stands unreviewed and uncorrected, then the interpretation of the Convention by this Court in *Zicherman* and *Tseng* will have no meaning with regard to damages recoverable under the Convention. Such an outcome will compromise and undermine the Court's holding in *Zicherman* and deprive international passengers who meet the

---

6. The trial judge, The Honorable Henry Woods, applying Arkansas law in denying American's Motion for Judgment as a Matter of Law, stated:

> The problem with the defendant's thesis is that the knee and calf injuries, the smoke inhalation, were all part of a terrifying accident which led to the plaintiff's PTSD. The uncontradicted testimony in this case is that the physical injuries were *a* proximate cause of the plaintiff's PTSD. The nexus is established, and there is nothing to support a holding that the physical injury be the *only* cause of psychological and mental injury. If that were the rule, no one surviving a serious air disaster could ever chin that pole.

In re Air Crash at Little Rock, Ark., on June 1, 1999, 118 F. Supp.2d 916, 923-24 (italics in original). Judge Woods further held that:

> This is not a case where the plaintiff pinched her little finger in her tray table. This is a case where there were real physical and mental damages. Even though any physical injury should permit a plaintiff to cross the liability threshold and access all available remedies in Warsaw cases, in this case the plaintiff's injuries were a proximate cause of her mental injuries.

118 F. Supp.2d at 916.

Convention's conditions for liability from having the same right to recover damages that domestic passengers are permitted to recover as indicated by this Court in *Zicherman*.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

JAMES PHILLIP MALCOM
Counsel of Record
ROBERT S. SHAFER
CLIFFORD W. PLUNKETT
FRIDAY, ELDREDGE & CLARK, LLP
Attorneys for Petitioner
2000 Regions Center
400 West Capitol Avenue
Little Rock, AR 72201-3493
(501) 376-2011

APPENDIX

OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE EIGHTH CIRCUIT, FILED MAY 29, 2002, CORRECTED JUNE 20, 2002

UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

No. 01-1047

In re: Air Crash at Little Rock
Arkansas, on June 1, 1999.

Anna Lloyd,

Appellee,

v.

American Airlines, Inc.

Appellant.

United States; Air Transport
Association of America, Inc.,

Amici on Behalf
of Appellant.

Appeal from the United States District Court
for the Eastern District of Arkansas.

Submitted: October 15, 2001

Filed: May 29, 2002 (Corrected June 20, 2002)

Appendix

Before HANSEN,[1] Chief Judge, McMILLIAN and BEAM, Circuit Judges.

BEAM, Circuit Judge.

American Airlines appeals the judgment and verdict in favor of Anna Lloyd in this multi-district litigation case. We affirm in part, reverse in part and remand for further proceedings.

I. BACKGROUND

On June 1, 1999, American Airlines flight 1420 crashed on the runway at Little Rock Airport in Little Rock, Arkansas. The pilot and ten passengers died as a result of the accident. Anna Lloyd was a passenger on this flight, returning from a three-week trip to Germany and Austria with a group of college singers from Ouachita Baptist University. This incident spawned several lawsuits, and the Judicial Panel on Multi-district Litigation consolidated the cases and transferred them to the Eastern District of Arkansas. Because Lloyd was an international passenger, she sued American under the Warsaw Convention for the Unification of Certain Rules Relating to International Transportation by Air, Oct. 12, 1929, 49 Stat. 3000, 876 U.N.T.S. 11 (1934), *reprinted in* 49 U.S.C. § 40105 note (1994) (the Warsaw Convention). Prior to trial, American moved for leave to file a third-party complaint against the United States for contribution in all cases arising out of the air crash, both domestic and

1. The Honorable David R. Hansen became Chief Judge of the United States Court of Appeals for the Eighth Circuit on February 1, 2002.

international. The district court granted the motion with regard to the domestic cases, but denied the motion for international cases. The district court ruled that because American signed a series of International Air Transport Association (IATA) inter-carrier agreements,[2] it was liable to the passenger in contract, not in tort, and therefore could not be a joint tortfeasor.

At trial, Lloyd's testimony about the accident and her recovery revealed the following facts. Lloyd was seated near the back of the airplane at the time of the crash, and her leg was punctured and scraped by the bolts from an airplane seat. She also suffered traumatic quadriceps tendinitis when other seats fell on her knees. Lloyd was treated for these injuries and smoke inhalation, and released from the hospital on the same night as the crash. Lloyd later saw two doctors concerning her knee injuries and underwent physical therapy for three to four weeks.

---

2. The three intercarrier agreements are related, but separate, agreements which operate in conjunction with each other and, among other things, serve to waive the Warsaw Convention's liability limitation "so that recovery may be determined and awarded by reference to the law of the domicile of the passenger." Tory Weigand, *The Modernization of the Warsaw Convention and the New Liability Scheme for Claims Arising Out of International Flight*, 84 Mass. L. Rev. 175, 183 (2000). These agreements were drafted by the International Air Transport Association, a trade organization of international air carriers. Blanca I. Rodriguez, *Recent Developments in Aviation Liability Law*, 66 J. Air L. & Com. 21, 33 n.24 (2000). By 1998, all United States international carriers and most of the major foreign carriers had implemented these agreements. *Id.*

Appendix

Following the accident, Lloyd spent the remainder of the summer with a friend in Texarkana, which is what she had planned to do before the accident, and worked with young children. The next fall, Lloyd returned to Ouachita and continued her studies toward becoming a music teacher. She testified that she was anxious and nervous that semester and struggled to get good grades. However, her cumulative grade point average for the 1999 fall semester was higher than her grade point average before the accident. Further, between the time of the accident and trial, Lloyd had traveled on three more trips with the Ouachita Singers. At the time of trial, Lloyd continued to suffer from flashbacks and panic attacks.

Lloyd scheduled an appointment with a psychiatrist, Dr. Harris, in March 2000. Prior to that appointment, Harris referred Lloyd to a psychological examiner, Dr. VanBlaricom, for testing. VanBlaricom performed psychological assessment tests and provided the results to Harris, who then diagnosed Lloyd as suffering from Post Traumatic Stress Disorder (PTSD) and a major depressive disorder. Harris also served as one of Lloyd's experts at trial. Harris testified that Lloyd's personality traits made her susceptible to PTSD, and that the condition was caused by Lloyd's experiences during the airplane crash. Harris stated that the physical injuries to Lloyd's legs were "a factor" in her PTSD and depression, but later testified that these conditions were not necessarily caused by her knee injuries, stating, "I think it was so horrible on that flight, she thought she was going to die, I think she would have had [PTSD] without the knee injury."

Harris also testified that Lloyd had a physical injury to her brain due to her chronic PTSD. He referred to academic articles on this subject, which state that the hypothalamus and limbic system in the brain of people with PTSD function abnormally. However, Harris did not testify that Lloyd's hypothalamus and limbic system functioned abnormally, and he also admitted that he did not perform available tests which could have determined if Lloyd suffered from any such abnormalities. Rather, Harris merely stated that Lloyd's brain was not functioning normally as evidenced by lack of sleep and concentration, as well as the flashbacks.

Dr. Charles Fuller, a professor of music at Ouachita, testified on Lloyd's behalf. Fuller testified that Lloyd had a "very low" chance of completing student teaching and becoming a music teacher. Fuller stated that following the accident, Lloyd lacked the ability to focus on school work; however, he also admitted that Lloyd successfully completed full course loads in the two semesters following the accident. Furthermore, Fuller related that while Lloyd had dropped classes in the fall 2000 semester, she did not need a full course load to complete her degree, and that she would be eligible to begin student teaching once she completed the course she was then taking.

American's psychiatric expert, Dr. Eth, examined Lloyd and her medical records and testified that with proper treatment, Lloyd's prognosis was "quite good." Finally, Lloyd's economic expert testified that her maximum economic losses, including future medical expenses and income loss due to her inability to attain a teaching certificate and become a music teacher, were $1,166, 875. 98.

At the close of the evidence, American made a motion for judgment as a matter of law to strike the claims for mental

injuries,[3] and argued that under *Eastern Airlines, Inc. v. Floyd*, 499 U.S. 530 (1991), such injuries were not recoverable under the Warsaw Convention. The district court denied this motion and also denied a motion for new trial. *In re Air Crash at Little Rock, Ark., on June 1, 1999*, 118 F. Supp. 2d 916, 917 (E.D. Ark. 2000).

The jury returned a $6.5 million verdict[4] in favor of Lloyd. American appeals, and argues that the verdict bears

---

3. We recognize that this type of injury is referred to in various cases under differing terminology, i.e., emotional, psychological, psychic injuries, etc. We intend the use of the terms "mental injuries" or "emotional distress" or "emotional damages" to include all such similar ailments.

4. Although the Warsaw Convention originally limited carrier liability to $8300, attempts at modification have occurred several times due to dissatisfaction with this low liability limit. Weigand, 84 Mass. L. Rev. at 176. Recent modifications include the intercarrier agreements referred to in footnote 2, *ante*. The agreements in force at the time of Lloyd's accident provided that the carrier was strictly liable for the first 100,000 SDR's ("special drawing rights" — an International Monetary Fund currency unit which takes inflation into account and is calculated according to the currencies of France, the United States, Germany, England and Japan). *Id.* at 181, 183-84. Beyond that amount, the passenger may prove and recover damages according to the law of the passenger's domicile, unless the carrier can prove it took all necessary measures to avoid the damages, *Piamba Cortes v. American Airlines, Inc.*, 177 F.3d 1272, 1282 n.5 (11th Cir. 1999), *cert. denied*, 528 U.S. 1136 (2000), a standard described as "nearly insurmountable" by one commentator. Rodriguez, 66 J. Air L. & Com. at 35. Thus, the $6.5 million verdict awarded by the jury was permissible under the version of the Warsaw Convention, as amended by the various intercarrier agreements, in place at the time of trial.

no reasonable relation ship to Lloyd's injuries, is grossly excessive as a matter of law, and shocks the conscience. American also argues the district court improperly admitted lay and opinion testimony, and finally, that the district court improperly precluded it from joining the United States as a third-party tortfeasor for contribution. The United States has filed an amicus curiae brief on behalf of American on this final point.[5]

II. STANDARD OF REVIEW

A motion for new trial is appropriately granted if the verdict is against the weight of the evidence and if allowing it to stand would result in a miscarriage of justice. This ruling is reviewed for an abuse of discretion. *Van Steenburgh v. Rival Co.*, 171 F.3d 1155, 1160 (8th Cir. 1999).

We review a district court's ruling admitting expert witness testimony under Rule 702 for an abuse of discretion. *Bonner v. ISP Techs., Inc.* 259 F.3d 924, 928 (8th Cir. 2001). We likewise review the trial court's admission of lay opinion testimony for abuse of discretion. *Wactor v. Spartan Transp. Corp.*, 27 F.3d 347, 350 (8th Cir. 1994).

The proper interpretation of the Warsaw Convention is an issue of law, which we review *de novo*. *Wallace v. Korean Air*, 214 F.3d 293, 296 (2d Cir. 2000), *cert. denied*, 531 U.S. 1144 (2001).

---

5. The United States argues that, while it believes it will eventually prevail on the contribution claim, it has a greater interest in the correct interpretation of the Warsaw Convention, which explains its participation as an amici in favor of a position which seems against its interest.

III. DISCUSSION

A. Recovery for Mental Injuries

American argues, as indicated, that the verdict was excessive as a matter of law and that the evidence established at trial does not support an award of $6.5 million. American also argues that mental injury damages are not recoverable at all under the Warsaw Convention, or in the alternative, that if they are recoverable, they are recoverable only to the extent that they flow from physical injuries. Under either scenario, according to American, a $6.5 million verdict is excessive.

In *Floyd*, the Court held that mental injuries, unaccompanied by physical injuries, were not compensable under the Warsaw Convention. The Court expressly left open the question of whether mental injuries accompanied by physical injuries were recoverable under the Convention. 499 U.S. at 552-53.

The aftermath of *Floyd* has led to a split of authority on the issue of when, if ever, to allow recovery for mental injuries. Very few, if any, courts have taken the primary stance that American advances-that emotional injuries are not recoverable at all under the Warsaw Convention. *See, e.g., Jack v. Trans World Airlines, Inc.*, 854 F. Supp. 654, 665 (N.D. Cal. 1994) (rejecting approach of allowing no recovery at all for mental injuries because that approach is too restrictive of passengers' rights). And in fact, the case American cites for this proposition, *Turturro v. Continental Airlines*, 128 F. Supp. 2d 170 (S.D.N.Y. 2001), does not

support this rigid theory. Instead, the *Turturro* court merely held that the plaintiff could not recover for physical manifestations of her emotional damages. *Id.* at 178.

The more mainstream view, and widely attributed to the decision of the Northern District of California in *Jack*, is that recovery for mental injuries is permitted only to the extent the distress is caused by the physical injuries sustained. 854 F. Supp. at 668. In Jack, Trans World Airlines Flight 843 attempted to depart from New York's JFK, but experienced an aborted takeoff, crash and fire on the runway, injuring three international passengers. In making its determination as to which damages should be recoverable, the court interpreted Article 17 of the Warsaw Convention and the *Floyd* decision. The court evaluated several possible approaches to emotional distress in a Convention case, ranging from no recovery at all to recovery only for distress "flowing from" the bodily injury. *Id.* at 665.

The *Jack* court concluded the "flowing from" approach was best, reasoning that it would prevent inequities among the passengers, such that "[t]he happenstance of getting scratched on the way down the evacuation slide [did] not enable one passenger to obtain a substantially greater recovery than that of an unscratched copassenger who was equally terrified by the plane crash." *Id.* at 668. Under this approach, a plaintiff cannot recover for the emotional distress arising from the accident itself. *Id.* This approach has been utilized by several lower courts which have considered the issue. *See Alvarez v. American Airlines, Inc.*, No. 98-Civ. 1027, 1999 WL 691922, at *5 (S.D.N.Y. Sept. 7, 1999) (airline not liable because the emotional injuries were not

proximately caused by physical injuries suffered during the accident); *Wencelius v. Air France, Inc.*, No. SACV 95-389, 1996 WL 866122 (C. D. Cal. Feb. 29, 1996) (same); *Longo v. Air France*, No. 95 CV 0292, 1996 WL 866124, at *2 (S.D.N.Y. July 25, 1996) (same). *Cf. In re Inflight Explosion on Trans World Airlines, Inc. Aircraft Approaching Athens, Greece on April 2, 1986*, 778 F. Supp. 625, 638-39 (E.D.N.Y. 1991) (passenger injured in an explosion and then ejected from plane in mid-air could recover for his conscious pain and suffering), *rev'd on other grounds sub nom. Ospina v. Trans World Airlines, Inc.*, 975 F.2d 35 (2d Cir. 1992); *Burnett v. Trans World Airlines, Inc.*, 368 F. Supp. 1152, 1158 (D.N.M. 1973) (damages for "mental anguish directly resulting from a bodily injury" were recoverable); *Rosman v. Trans World Airlines, Inc.*, 314 N.E.2d 848, 856-57 (N.Y. 1974) (holding that under Warsaw Convention, only damages which "flowed from" bodily injury are compensable).

On the other hand, some courts have permitted full recovery for mental injuries, provided only that there are some physical injuries as well, even unrelated, which serve as a threshold to recovery for psychological injuries. *See In re Aircrash Disaster Near Roselawn, Ind. on Oct. 31, 1994*, 954 F. Supp. 175, 178-79 (N.D. Ill. 1997) (permitting recovery for pre-impact fear when the impact resulted in physical injury and death); *Chendrimada v. Air-India*, 802 F. Supp. 1089, 1092-93 (S.D.N.Y. 1992) (denying motion to dismiss plaintiffs' claim for compensation for mental injuries when the plaintiff also alleged physical injuries, including nausea and cramps).

The district court followed the *Roselawn* approach and ruled that a physical injury was simply a prerequisite to full recovery for mental injury. Once a physical injury was established, all of Lloyd's mental injuries were deemed compensable. 118 F. Supp. 2d at 921.

We disagree with this approach, and hold that damages for mental injury must proximately flow from physical injuries caused by the accident. This approach is consistent with *Floyd*, yet provides full compensation for the victim within the bounds established by the Warsaw Convention. If the emotional damages "flow from," or are caused by, physical injuries, the physical injuries will not be fully compensated if we do not allow recovery for this aspect of the harm. However, allowing a physical injury, no matter how minor or unrelated, to trigger recovery of any and all post-crash mental injuries would violate both the letter and spirit of *Floyd*. Thus, the district court' s ruling that a showing of any physical injury is sufficient to trigger recovery for all emotional damages, regardless of the causal connection between the two, is reversed.

The district court also ruled, in the alternative, that Lloyd adequately established a nexus between her physical injuries and her mental injuries sufficient to justify a $6.5 million verdict. 118 F. Supp. 2d at 921. Again, we disagree. Lloyd suffered smoke inhalation and fairly deep cuts to her lower legs, both injuries for which she was treated and released from a Little Rock hospital the same night as the crash. She also suffered injuries to her quadriceps that required physical therapy for a month or so. Lloyd's mental injuries are, as indicated, PTSD and depression.

While we agree that the physical injuries to Lloyd's legs may have caused some of her emotional damages, we also agree with American's contention that Lloyd's physical injuries did not "cause[] PTSD sufficient to sustain the principal component of an award of $6,500,000." Appellant's Brief at 24 n.13. Instead, in accordance with the "flowing from" rule we announce today, we find that Lloyd can recover only emotional damages which flow from the injuries to her legs and the smoke inhalation. In this regard, the evidence shows that the bulk of Lloyd's mental injuries did not result from these physical injuries. First, Lloyd testified in a deposition that her knee injuries did not cause her PTSD. Second, her expert witness, Dr. Harris, testified that the experience of being in the crash was the cause of Lloyd's mental injuries. When asked, on cross-examination, whether Lloyd would have suffered PTSD if she had not injured her legs, Harris replied, "Yes. I think it was so horrible on that flight, she thought she was going to die, I think she would have had it without the knee injury." Finally, the district court's reasoning suggests that it also believed the accident, and not the physical injuries, caused Lloyd's PTSD, stating, "the knee and calf injuries, the smoke inhalation, were all part of a terrifying accident, which led to [Lloyd's] PTSD." 118 F. Supp. 2d at 923.

Therefore, under the *Floyd* interpretation of the Warsaw Convention, we must draw a line between mental injuries flowing from physical injuries suffered in the crash and mental injuries directly caused by the accident. At the bottom line, Lloyd's evidence at trial was simply not sufficient to establish a $6.5 million connection between her relatively insignificant physical injuries and her very significant PTSD and depression.

Finally, the district court offered a second alternative ruling-that Lloyd's PTSD was actually a physical injury within the meaning of the Warsaw Convention. 118 F. Supp. 2d at 924. In so concluding, the district court credited Dr. Harris's testimony that people with chronic PTSD may have brain dysfunction, meaning that PTSD is both biological and psychological. *Id.* According to the district court, under this theory, Lloyd suffered a physical injury — to her brain. However, there is no contention that Lloyd suffered a head injury of any kind in the crash. Indeed, it is uncontroverted that her only physical injuries as a result of the accident came from leg trauma and smoke inhalation.

We reject this second alternative theory for two reasons. First, as discussed further in Section B, we note there is a complete lack of proof that Lloyd actually suffers from physical changes to her brain as a result of chronic PTSD. Lloyd was not given a magnetic resonance spectroscopy, a positron emission tomography (PET) scan or a single positron emission computed tomography (SPECT) scan, all tests which Dr. Harris testified could have been utilized to show the functioning of Lloyd's brain. Her blood was not tested for elevated levels of cortisol or other hormones, which could also have indicated a dysfunctioning hypothalamus or thyroid. The only evidence that Lloyd's brain actually underwent a physical change was Dr. Harris's otherwise unsupported opinion that it did. Dr. Harris based this opinion on Lloyd's symptoms of disrupted sleep and concentration, and flashbacks. We find that this testimony was not adequate, as a matter of law, to establish a physical change to Lloyd's brain.

Further, if Lloyd elects to proceed to a new trial and is subsequently able to prove that she does have a physical injury to her brain, we hold that subsequent physical manifestations of earlier emotional injury are not compensable under the Warsaw Convention. Two other circuit courts which have considered this issue are in accord with our decision. *See Carey v. United Airlines*, 255 F.3d 1044, 1052 (9th Cir. 2001); *Terrafranca v. Virgin Atlantic Airways, Ltd.*, 151 F.3d 108, 110-11 (3d Cir. 1998).[6]

The *Terrafranca* court considered whether the plaintiffs weight loss was compensable under the Warsaw Convention as a physical manifestation of mental injury. The court examined *Floyd* and concluded that dicta in the final section of the opinion did not authorize this theory of recovery. The *Terrafranca* court underscored the requirement of direct causation between the accident and the physical injury, stating, "[w]e therefore hold that [plaintiff] must demonstrate direct, concrete, bodily injury as opposed to mere manifestation of fear or anxiety." 151 F.3d at 111.

In *Carey*, the plaintiff's physical manifestations of mental injury consisted of sleeplessness, nausea, cramps and perspiration. The court reasoned that it would undermine *Floyd* to allow recovery for physical manifestations of emotional distress injuries, stating, "[a]s a practical matter, *Floyd* 'would thus be converted into an easily satisfied

---

6. While we found the *Jack* court's reasoning persuasive concerning allowing only mental injuries that flow from the physical injuries, we disagree with its dicta that damages for physical manifestations of emotional distress could be possibly recovered. 854 F. Supp. at 667-68.

pleading formality, and a back door would be impermissibly opened to recovery for purely psychological injuries' so long as plaintiff could allege nausea and the like." 255 F.3d at 1052 (quoting *Alvarez*, 1999 WL 691922, at *4).

Floyd draws a clear line between physical injuries and mental injuries. Once recovery is allowed for a physical manifestation of a mental injury, the distinction becomes blurred and under our reading of *Floyd*, this approach is disallowed. Accordingly, we agree with the reasoning in *Carey* and *Terrafranca* and reverse the district court's second alternative holding that Lloyd's PTSD and purported physical changes to her brain were compensable under the Warsaw Convention.

In sum, our holding today is that emotional damages are recoverable under the Convention to the extent that they are caused by physical injuries suffered in the accident. On the other hand, physical manifestation of mental injuries such as weight loss, sleeplessness, or physical changes in the brain resulting from chronic PTSD are not compensable under the treaty. Finally, the evidence at trial of the physical injuries Lloyd suffered and of the emotional injuries which were caused by those physical injuries, was not sufficient to sustain a $6.5 million verdict.

Clearly Lloyd suffered compensable physical injuries and it is equally clear that some of her emotional trauma can be fairly traced to those injuries, albeit much less than would account for the $6.5 million award. Although not long in duration, the trial of this case was obviously stressful given Lloyd's emotional condition. Accordingly, we are reluctant

to order a new trial without permitting the acceptance of a remittitur in lieu of another adversary proceeding.

An appellate court may condition affirmance upon the plaintiffs acceptance of a remittitur, and there is a somewhat lengthy history of the practice in this circuit. *See Hale v. Firestone Tire & Rubber Co.*, 820 F.2d 928, 936-37 (8th Cir. 1987) ($1.7 million punitive damages award remitted to $1 million rather than ordering a fourth new trial); *Hollins v. Powell*, 773 F.2d 191, 198 (8th Cir. 1985) ($500,000 compensatory and punitive damages awards under section 1983 remitted or plaintiffs were free to retry the issue of damages before another jury); *Everett v. S. H. Parks & Assocs., Inc.*, 697 F.2d 250, 253 (8th Cir. 1983) (though defendant had unsuccessfully moved trial court for a remittitur "[an] appellate court may itself order a new trial unless the plaintiff consents to a remittitur in a specific amount") (citing 11 C. Wright & A. Miller, Federal Practice and Procedure § 2820, at 133-34 (1973)); *United States v. 47.14 Acres of Land, More or Less, Situated in Polk County*, 674 F.2d 722, 728 (8th Cir. 1982) (commission's award based on erroneous use of income capitalization method remitted to conserve judicial resources for complex, lengthy litigation); *Stineman v. Fontbonne Coll.*, 664 F.2d 1082, 1088-89 (8th Cir. 1981) ($800, 000 personal injury award for the loss of an eye during a college softball game remitted to $200,000 where medical bills did not exceed $5,000, and jury award "grossly exceed[ed] the damages proven at trial"); *Arnott v. American Oil Co.*, 609 F.2d 873, 889 (8th Cir. 1979) ($325,000 verdict in antitrust case remitted to $125,000); *Kropp v. Ziebarth*, 601 F. 2d 1348, 1355 (8th Cir. 1979) (per curiam) (in light of the case's complexity, the large record,

and the length of time that had transpired since the events in question, court offered remittitur option rather than ordering a new trial where evidence of damages at prior trial was duplicative).

In light of the amount of time that has passed since the accident in June 1999, and because this was one of several cases on the multi-district litigation docket, instead of ordering a new trial on damages, we offer Lloyd the option of accepting a remittitur for a final judgment of $1.5 million. We find that number more in line with the evidence presented at trial, including that from Lloyd's own experts. If Lloyd is not agreeable to a remittitur of this amount, we reverse and remand for a new trial.

B. Evidentiary Rulings

In the event that Lloyd does not accept the remittitur and proceeds to a new trial, we address American's assignments of evidentiary error regarding the testimony of Drs. Harris and Fuller.

1. Dr. Harris

American challenges the testimony of Lloyd's expert, Dr. Harris, that Lloyd's PTSD was actually a biological syndrome, rather than merely a psychological one. Harris testified that "researchers have shown brain dysfunction in people who have chronic PTSD" and based his opinion that Lloyd had brain dysfunction on this outside research. Harris testified that there were functional tests that would show physiological changes in the brain, but admitted that he did

not perform any of these tests on Lloyd. At trial, American made a motion to exclude Harris's testimony on brain function and PTSD because he was not a neurosurgeon, because he did not perform the functional tests on Lloyd, and because the theory that PTSD results in physical changes to the brain is not a recognized psychiatric concept. The district court denied the motion. Lloyd argues that American's request for a *Daubert* hearing was untimely and that American did not preserve the issue for appeal since it failed to renew its objection during Harris's trial testimony.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Supreme Court detailed the Rule 702 standard for admission of scientific evidence. *Daubert* offers general criteria for assessing the reliability of scientific evidence, and directs the district court to perform a gatekeeping function with respect to such evidence to ensure that evidence submitted to the jury meets Rule 702's criteria for relevance and reliability . *Id.* at 590-91. The rule's concern with scientific knowledge bottoms on issues of reliability, while the requirement that the evidence "assist the trier of fact to understand the evidence or determine a fact in issue" is a relevance test. *Id.*

Daubert demands an assessment of whether the expert's methodology has been tested, and an inquiry into whether the technique has been subjected to peer review and publication, has a known or knowable rate of error, and has been generally accepted in the proper scientific community. *Bonner*, 259 F.3d at 928-29 n.3. We recognize that the district court has considerable latitude in determining whether expert testimony will assist the trier of fact and be reliable, and it

may consider one or all of the *Daubert* factors in making this determination. *United States v. Larry Reed & Sons P'ship*, 280 F.3d 1212, 1215 (8th Cir. 2002).

Of American's three objections to Harris's testimony, only the third-that physical changes to the brain resulting from PTSD is not recognized in the psychiatric community-actually raised a *Daubert* issue. Unfortunately, the district court does not appear to have considered any of the *Daubert* factors in addressing this objection. The district court merely noted that Harris was a qualified psychiatrist, and then stated "It's beyond my competence. I don't know whether what he says is true or not or what he says in the deposition, that there is research material that shows brain changes as a result of this syndrome." Tr. at 328. This inquiry was not adequate to satisfy the district court's essential gatekeeping role under *Daubert*. However, Lloyd's point that American requested the *Daubert* hearing too late in the game is well-taken. During the hearing on the motion, which was held prior to Lloyd's testimony on the second day of trial, the district court noted that in prior cases where *Daubert* was raised, "we have had extensive depositions taken on the issue and have had hearings. Now, this thing is sprung on me right before the man is to testify. I think that's a little bit late in the day to raise this particular issue." Tr. 328-29. We agree with the district court that when reasonably possible, Daubert issues should be raised prior to trial and that ideally the Daubert "hearing" should not be conducted following a fifteen-minute morning recess shortly before the expert is scheduled to testify.

However, American' s second objection to Harris's testimony — that there was an inadequate nexus shown between the scientific theory and any physical condition in Lloyd's brain – carries the day. See *Weisgram v. Marley Co.*, 169 F. 3d 514, 521-22 (8th Cir. 1999) (expert testimony not reliable where there was lack of nexus between theory and conclusion), *aff'd*, 528 U.S. 440 (2000). Because no doctor performed any of the various available diagnostic tests, there was no connection established between the alleged physical brain changes Harris referred to in his testimony and Lloyd's condition. As previously discussed in Section A, Harris based his conclusion on Lloyd's disrupted sleep, lack of concentration and flashbacks. This was an inadequate foundation upon which to base the opinion that a *physical change* had taken place in Lloyd's brain.

Lloyd's argument that American failed to object, and therefore preserve error, during Harris's testimony is unavailing. The lengthy objection, covering over seven pages of trial transcript, and made roughly one hour before Harris testified, was sufficient to preserve this issue on appeal. The objection was made at trial, close in time to when Harris testified, and any further objection during Harris's testimony an hour later would have been "more in the nature of a formal exception," which is not necessary, rather than "a timely objection calling the court' s attention to a matter it need consider." *Sprynczynatyk v. General Motors Corp.*, 771 F.2d 1112, 1118 (8th Cir. 1985).

If this case proceeds to a second trial and if this testimony is deemed relevant in measuring any recoverable damages, and it may not be given our earlier rulings, we find that a

Daubert hearing should be conducted prior to trial. We direct the district court to consider the relevant factors set forth in *Bonner*, 259 F.3d at 928-29 n.3, to determine whether testimony on the theories advanced by Harris should be admitted in evidence. We agree with the district court that as a psychiatrist who regularly treats PTSD patients, Harris is sufficiently qualified as an expert to testify on this subject, should it pass *Daubert* muster. Finally, Harris should not be allowed to opine that Lloyd actually has a physical brain injury unless tests are performed which objectively support this conclusion.

2. Dr. Fuller

American also challenges the opinion testimony of Dr. Fuller, one of Lloyd's college professors, who recounted Lloyd's difficulties in school following the accident and also gave an opinion about Lloyd's chances of becoming a music teacher. Specifically, Fuller stated that Lloyd would have a very low chance of having a successful student teaching experience, which was a requirement for completing her teaching degree. Fuller was the supervisor of music student teachers at Ouachita College.

American alleges that Fuller was not qualified as an expert and that he gave improper lay opinion testimony. Although the evidence at trial clearly qualified Fuller to testify as an expert, it does not appear that his opinions were offered as those of an expert witness.[7] Instead, Fuller's

7. We also note that the objections at trial were not specifically directed toward his lack of expert qualifications. Instead, counsel only objected to the "form of the question" and the "witness' capabilities" to answer the questions propounded.

testimony was based on his personal knowledge and observations of Lloyd at college both before and after the accident. This is more in the nature of lay opinion testimony than expert testimony. *See Wactor*, 27 F.3d at 351 (experienced lockmen from the Army Corps of Engineers gave permissible lay opinion based on their participation and observations of events leading up to the plaintiff's injury). We therefore analyze the issue as lay opinion testimony.

Rule 701 requires that lay witness opinion testimony need only be rationally based on perception and helpful to a determination of a fact in issue. Fed. R. Evid. 701. Personal knowledge or perceptions based on experience is a sufficient foundation for such testimony. *Id.* at 350. Lay opinion testimony is admissible if an analysis of the events, in the form of an opinion, is necessary. *Id.* at 351.

We find it was within the district court' s considerable discretion to admit the opinions of Fuller. Because of Fuller's personal knowledge of Lloyd and his experience as the supervising instructor of music student teachers at a smaller university in Oklahoma, he was qualified to give an opinion about Lloyd's chances of successfully completing her student teaching requirements. Furthermore, his perceptions and analysis of Lloyd's school experiences following the accident were likely useful to the trier of fact in determining Lloyd's damages. Therefore, whether the proof offered is considered expert testimony or lay opinion, the district court' s decision to receive Fuller's testimony was correct.

C. Contribution

Our final task is to review the district court's denial of American's motion (now joined and supported by the United States) for leave to file a third-party complaint for contribution against the United States and an air traffic controller in this and other cases on the multi-district litigation docket arising from this incident. Because this particular motion turns on an interpretation of the Warsaw Convention, we review the question *de novo*. *Wallace*, 214 F.3d at 296.

The district court reasoned that American, as a signatory to the most recent intercarrier agreements, reserved its right to seek indemnity and contribution as provided by law. However, under Arkansas law, the district court stated, American had no right to contribution because it was liable to international passengers in contract, and not tort, under the agreements. The district court reasoned that Arkansas law provides no right of contribution when one party is liable in tort (presumably the United States) and the other party is liable in contract (presumably American).

Contrary to the district court's conclusion, international cases under the Warsaw Convention, even in light of the intercarrier agreements, sound in tort and not contract. The Convention provides a tort remedy, not one in contract. *See In re Air Disaster at Lockerbie, Scot. on Dec. 21, 1988*, 928 F.2d 1267, 1279 (2d Cir. 1991) (Convention is tort remedy, not contractual, as evidenced by the causes of actions it preempts — claims the common law normally associates with the law of tort), *overruled on other grounds Zicherman*

v. Korean Air Lines Co., Ltd., 516 U.S. 217, 229-31 (1996) (holding that contrary to Second Circuit precedent, domestic common law applied to Convention damages claims).

Although not the precise issue before the Court, language in *El Al Israel Airlines, Ltd. v. Tseng*, 525 U.S. 155 (1999) bolsters our conclusion. In *Tseng*, the question before the Court was whether the exclusivity provisions of the Warsaw Convention preempted the state tort remedy of a passenger who was intrusively searched before boarding an international flight. *Id.* at 160. The Court held that the treaty precludes a passenger from bringing an action for personal injury pursuant to state law, even though the incident in question did not qualify as an accident under the Convention. *Id.* at 176. The Court pointed out that the preemptive effect of the Warsaw Convention extended only to its "substantive scope." *Id.* at 172. We think the "substantive scope" of preempted claims for personal injury damages is tort law. *Cf. Hussman v. Trans World Airlines, Inc.*, 169 F.3d 1151, 1152 (8th Cir. 1999) (remand to state court not appropriate in suit for personal injuries arising from airline accident because Convention preempted such claims).

Next, the intercarrier agreements do not alter the fundamental nature of the tort remedy in the Warsaw Convention. These agreements arose out of concerns with the treaty's low liability limits and they serve only to modify these limits; they do not themselves provide a cause of action. Further, the agreements are actually between the airline members of the IATA, rather than between airlines and passengers. Weigand, 84 Mass. L. Rev. at 182.

Because the Warsaw Convention's tort remedy for damages has not been altered by the intercarrier agreements, the district court's reasoning that Arkansas law permits third-party claims in the domestic cases applies in the international cases as well. We therefore reverse the district court's ruling and direct it to allow American to file a third-party complaint against the United States. *Cf. Piamba Cortes v. American Airlines, Inc.*, 177 F.3d 1272, 1305 (11th Cir. 1999), *cert. denied*, 528 U.S. 1136 (2000) (carrier free to pursue a contribution cause of action against other potential tortfeasors independent of the Convention).

IV. CONCLUSION

For the foregoing reasons, we conditionally affirm the judgment of the district court, subject to Lloyd's acceptance of a remittitur for judgment in the amount of $1.5 million.[8] We reverse the district court's denial of American's motion for leave to file a third-party complaint against the United States for contribution. Absent Lloyd's acceptance of the remittitur, we reverse and remand for proceedings consistent with this opinion.

A true copy.

Attest:

CLERK, U.S. COURT OF APPEALS,
EIGHTH CIRCUIT.

---

8. Because we conditionally affirm the judgment, Rule 37(a) of the Federal Rules of Appellate Procedure provides that Lloyd may recover post-judgment interest on the remitted amount, $1.5 million, from the date the district court originally entered judgment in this case on October 27, 2000.

OPINION AND ORDER OF THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF ARKANSAS, FILED OCTOBER 27, 2000

UNITED STATES DISTRICT COURT
EASTERN DISTRICT ARKANSAS
WESTERN DIVISION

MDL DOCKET NO. 1308
Judge Henry Woods

This Document Relates To:

4:00CV00300HW

IN RE AIR CRASH AT LITTLE ROCK,
ARKANSAS, ON JUNE 1, 1999

ANNA LLOYD

PLAINTIFF

VS.

AMERICAN AIRLINES, INC.

DEFENDANT

ORDER

Procedural History:

The trial in the case of Anna Lloyd against American Airlines, Inc. began on Tuesday, October 10, 2000 and concluded on Thursday, October 12, 2000. The jury returned a verdict in favor of the plaintiff in the amount of $6,500,000.

Appendix

At the close of the plaintiff's case, and again at the conclusion of the defendant's case, the defendant moved for judgment as a matter of law as to Ms. Lloyd's claim for damages for Post-Traumatic Stress Disorder (PTSD) on the ground that her mental and emotional problems did not flow from any physical injury; that is, that her PTSD is the result of the trauma of going through the crash landing of flight 1420, and was not proximately caused by physical injuries suffered in the crash.

Background:

When flight 1420 crashed and burned on a stormy runway on the night of June 1, 1999, Anna Lloyd was sitting at the very back of the airplane. During the crash and ensuing fire in the cabin of flight 1420, Ms. Lloyd was injured, both physically and mentally. Physically, she suffered a puncture wound, apparently when parts of airplane seats came unhinged and struck the back of the leg, puncturing her skin. She also suffered injury to her knee when seats collapsed on the fronts of her legs while her knees were extended, causing traumatic quadriceps tendinitis. She also suffered from smoke inhalation while she was trapped in the back of the plane. Although the plaintiff concedes that these physical injuries have, in the main, subsided, she does have scarring on her leg as a result of the puncture wound, and she continues to experience stiffness in her knee.

The plaintiff's primary damages consist of debilitating emotional and psychological injuries. Her unrebutted testimony established that she reasonably believed that she would die in the wreckage of flight 1420 when the cabin

filled with fire and smoke, and she was trapped in the back of the plane. Her remarkable escape from the burning plane was through a relatively small hole in the wreckage, because all emergency exits were apparently jammed shut after the crash, and a wall of fire and smoke prevented her escape to the front of the plane. The plaintiff now suffers from serious, chronic PTSD and major depression.

At trial, the defendant disputed the permanency of the plaintiff's PTSD, but did not dispute that she suffers from serious PTSD and from major depression as a result of the crash. In its motion for judgment as a matter of law, the defendant argues that the plaintiff should not be allowed to recover for PTSD at all, whether it be temporary or permanent, because the PTSD does not flow from her physical injuries. Defendant primarily relies on the testimony of the plaintiffs treating psychiatrist who testified that, in his opinion, Ms. Lloyd would have suffered from PTSD even without the knee injury.

Analysis:

A. Does physical injury open the door to all damages, whether physical or mental?

In *Eastern Airlines, Inc. v. Floyd*, 499 U.S. 530, the United States Supreme Court considered whether, in a case covered by the Warsaw Convention, a passenger could recover for purely mental or psychic injury in the absence of physical injury or physical manifestation of injury. The Court held as follows:

> "We conclude that an air carrier cannot be held liable under Article 17 [of the Warsaw Convention] when an accident has not caused a

> passenger to suffer death, physical injury, or physical manifestation of injury."

Id. at 552. The Court declined to decide "whether passengers can recover for mental injuries that are accompanied by physical injuries." *Id.*

The facts in *Floyd* are quite different from the undisputed facts in the present case. Nonetheless, there are applicable lessons. In *Floyd*, an Eastern Airlines flight was en route from Miami, Florida to the Bahamas. Three of the airplane's four engines failed shortly after takeoff. The plane began to lose altitude, and the Eastern crew told the passengers that the plane would soon crash land in the Atlantic Ocean. Fortunately for all concerned, the pilots managed to land the airplane in Miami, and there was no crash. A number of passengers aboard the Eastern flight sued for emotional distress. The principal distinction between Floyd and the case at bar is that the fears of the passengers on the Eastern flight did not come to fruition, whereas the worst fears of the passengers on board flight 1420 did, in fact, come to pass as the airplane crashed and burned.

In *Floyd*, the airline argued that "Article 17 . . . makes physical injury a condition of liability." *Id.* at 533. The Court noted that the American translation of the text of the Warsaw Convention, which was originally written in French, was presented to the United States Senate for ratification in 1934 as follows:

> "The carrier shall be liable for damage sustained *in the event of death or wounding of a*

> *passenger or any other bodily injury* suffered by a passenger . . . on board the aircraft or in the course of any of the operations of embarking or disembarking."[1]

Floyd at 535 (Emphasis in *Floyd* but not in Warsaw Convention). As noted above, the Court concluded that, "Article 17 does not allow recovery for purely mental injuries." *Id.* at 534.

Thus, the Supreme Court requires physical injury in order for an international passenger to recover. According to undisputed testimony at trial, Anna Lloyd suffered physical injury to her knee, and to the back of her leg. She also suffered smoke inhalation, and had cuts and scrapes as a result of crawling through the small opening in the wreckage of the airplane to escape. It is also undisputed that the plaintiff suffers mental injuries in the form of PTSD and depression as a result of the crash.

Is the requirement of physical injury for recovery under the Warsaw Convention a threshold which triggers liability, after which a plaintiff can recover for all injuries, including mental; or does the physical injury requirement imply that psychic injury is compensable only to the extent it flows from,

---

1. According to the original French text, the airline is responsible, "*en cas de mort, de blessure ou de toute autre lesion corporelle.*" Ms. Lloyd obviously did not suffer *mort* (death), but she did suffer both other injuries enumerated. It is undisputed that Anna Lloyd suffered both *la blessure* in the wound to her right calf, and *autre lesion corporelle* (other bodily injury) when she suffered smoke inhalation and damage to the tendons in her knee.

or is proximately caused by, the physical injury? A second question is whether chronic PTSD and depression, from which the plaintiff undoubtedly suffers, are physical injuries in and of themselves in the sense that they cause changes in the way the brain physically functions. In other words, are chronic PTSD and major depression physical manifestation of injury because of alterations they cause in brain function?

In *Floyd*, the Supreme Court set out the conditions, or prerequisites, for liability under the Warsaw Convention:

> "Thus, under Article 17 [of the Warsaw Convention], an air carrier is liable for passenger injury only when three conditions are satisfied: (1) there has been an accident, in which (2) the passenger suffered 'mort,' 'blessure,' 'ou . . . toute autre lésion corporelle,' and (3) the accident took place on board the aircraft or in the course of operations of embarking or disembarking."

Floyd at 535-36. These requirements go to *liability* of the air carrier, and not to damages. The Court speaks of "conditions" establishing when an air carrier is "liable." It does not discuss the types of damages available. In *Floyd*, the passengers lost because the Court found the air carrier was not liable under the terms of the Warsaw Convention. The language of the Warsaw Convention itself speaks of the "event" that triggers liability:

> "The carrier *shall be liable* for damage sustained *in the event* of death or wounding of a

> passenger or any other bodily injury suffered by a passenger. . . ."

49 Stat. 3018 (Emphasis added).

Once liability has been established under the Warsaw Convention, the question of damages is determined by the law of the passenger's domicile or place of permanent residence. The air carriers specifically agreed to have damages decided in this manner. The 1996 International Air Transport Association (IATA) Agreement, which supplements the Warsaw Convention, specifically provides that damages in Warsaw cases are to be determined in accordance with the law of the domicile or permanent residence of the passenger. Because the Convention makes no provision for specific elements of damages, the air carriers have properly supplemented the Convention with the IATA Agreement.

In *Floyd*, the Supreme Court offered two explanations for why the Warsaw Convention itself makes no mention of mental injuries:

> "(1) [M]any jurisdictions did not recognize recovery for mental injury at that time, or (2) the drafters simply could not contemplate a psychic injury unaccompanied by a physical injury."

Floyd, at 544. The second explanation lends credence to the notion that physical injury is a prerequisite, or threshold requirement, in order to recover for mental or psychic injury.

Appendix

Federal courts have come to different conclusions regarding the nexus required between physical and psychic injuries suffered by passengers involved in airline accidents. In *In re Aircrash Disaster Near Roselawn, Indiana*, 954 F.Supp. 175 (N.D.Ill. 1997), the district court noted that the Warsaw Convention itself contains no prohibition against the recovery of any particular type of damages and held that, once liability has been established, passengers may recover for all the damage they sustained in the accident, both physical and emotional.

On the other hand, in *Jack v. Trans World Airlines*, 854 F.Supp. 654 (N.D. Cal. 1994), a district court held that Warsaw passengers could recover only for those mental damages which flowed from the physical injury. The *Jack* court was concerned with the inequity of permitting one passenger with a slight physical injury to recover for mental and emotional injury, while another passenger with severe emotional injury, but no physical injury, would be unable to recover.

> "The happenstance of getting scratched on the way down the evacuation slide [might] enable one passenger to obtain a substantially greater recovery than that of an unscratched co-passenger who was equally terrified by the plane crash."

Jack at 668.

The district court in *Longo v. Air France*, 1996 WL 866124 (S.D.N.Y. 1996), refused to allow the plaintiffs to recover for their fear of death after the plane they were on

was unable to stop upon landing and skidded into the ocean. The plaintiffs suffered minor bruising during the landing and emergency evacuation into the water, and one plaintiff stepped on a sea urchin. The district court granted the defendant's motion to dismiss the claim for emotional injury.

> "To rule otherwise would be to give a windfall to that passenger who, in the course of evacuating, fortuitously pinched his little finger in his tray table."

Longo at 2.

Inequity of remedies is always a concern, but it should not be used to deny recovery to a passenger who is entitled to damages. As the court in *Roselawn* noted:

> "We are not unmoved by the reasoning of [courts which fear inequities], but believe that it represents a policy argument that we are not empowered to engage in here, where the commands of Article 17 itself and our Supreme Court are relatively plain. . . . We agree with the lower court opinions . . . that possible inequities of recovery among equally terrified fellow passengers present a very real and troubling issue. . . . We view this problem as a side effect of Article 17's focus on physical injury as a threshold requirement for liability, rather than being caused by permitting passengers to recover for the damage they sustained in the accident —both physical and emotional — once liability is established."

Roselawn at 179.

Appendix

This Court is always troubled by the seeming inequities in the law resulting from the application of different standards for recovery, but an attempt to "make it fair" by denying one person a right to recover because another person, somewhat similarly situated, is unable to recover is a draconian solution. For example, I held, before the Lloyd trial, that plaintiffs suing under Arkansas law, whether international or domestic passengers, could not sue for pre-impact fright or terror. I based this ruling on an old Arkansas case, *Chicago, R.I. & P. Co. v. Caple*, 207 Ark. 52, 179 S.W.2d 151 (1944), in which the Supreme Court of Arkansas held that there could be no recovery for fright and emotional distress experienced before impact. In *Caple*, a child caught her foot in a cattle guard which crossed a railroad track. As the child watched a train bearing down on her, she frantically screamed and waved to warn the train, but was unable to extricate her foot. The train hit the child, knocking her body several feet from the track. She died from the injuries sustained in the accident.

The Arkansas Court held that the child's estate could not recover for the terror she must surely have felt watching the train travel for more than eight hundred feet before it hit her. This is not the most enlightened holding in the jurisprudence of the State of Arkansas. Nonetheless, it is the law in Arkansas. In accordance with the *Caple* case, I have refused to allow plaintiffs, whose damages are controlled by Arkansas law, to adduce evidence of their fright, terror, or sense of impending doom as the plane made its way from Dallas, Texas to Little Rock, Arkansas in a severe thunderstorm before the crash.

On the other hand, one international passenger on flight 1420 was a domicile of the State of Oklahoma. Oklahoma recognizes a right to recover for pre-impact fright. Thus, the Oklahoma domiciliary was permitted to recover for her pre-impact fright and terror, whereas that element of damage was not available to the plaintiff in this case. Both the Oklahoma domiciliary and the plaintiff in this case were international passengers covered by the Warsaw Convention; they had traveled together throughout their university's trip abroad; they boarded flight 1420 together in Dallas. Nonetheless, due to the differences in applicable law, one Warsaw passenger was permitted to recover for pre-impact fright, and the other was not.

Furthermore, there were both domestic and international passengers injured when flight 1420 crashed. Passengers covered by the Warsaw Convention are precluded from seeking punitive damages. Domestic passengers are free to assert such a claim. This is true even though the domestic and international passengers were all affected by the disaster. Passengers whose damages are limited by the Warsaw Convention would, no doubt, like to avail themselves of the same opportunity to sue for punitive damages as the domestic passengers have; but that is not the law. Should I preclude the domestic passengers from suing for punitive damages because the international passengers cannot recover this type of damage?

It is the duty of trial judges to apply the law as it has been established by the Congress (in the case of the Warsaw Convention), state legislatures, and higher courts (in the case of the *Floyd* decision). It is no solution to the problem of

perceived "inequity" in the application of the law to prevent a plaintiff with the requisite physical injuries from recovering for emotional damage just because some bend in the law prevents another plaintiff from recovering.

B. The nexus between mental injury and physical injury

I have held that once the threshold of liability has been crossed by a passenger in a Warsaw case by proving physical injury, then all damages available under the law of the passenger's domicile are recoverable, whether mental or physical, whether pre-impact or post-impact. Even if I thought the law required a connection between the physical injuries and the mental injuries, I find that the plaintiff in this case has adequately established the nexus between her physical injuries and her mental injuries. To be sure, the severity of her mental injuries far exceed the physical; nonetheless, they are tied.

In the case of *Alvarez v. American Airlines, Inc.*, 1999 WL 691922 (S.D.N.Y.), an international passenger, covered by the Warsaw Convention, was on an airplane headed from New York to Santo Domingo. Immediately after leaving the gate, the plane stopped. Fumes, then smoke, began to fill the cabin. All passengers were instructed to get out of the airplane. The plaintiff suffered bumps to his buttocks and knee when several of the exiting passengers piled up on the inflatable exit ramp. The plaintiff boarded another flight and completed his journey to Santo Domingo. He was later diagnosed with PTSD. The district court granted summary judgment to the airline on the issue of the plaintiff's psychological damages.

Appendix

In *Alvarez*, the plaintiffs did not allege any substantial causal connection between the two types of injury. *Alvarez* at 3. The court acknowledged that the requirement of a causal connection is an open question after the Supreme Court's decision in *Floyd*. The major distinction between the facts in *Alvarez* and the facts in the case before this Court is that the plaintiff in this case presented ample evidence that her psychological injuries are related to the physical injuries she suffered.

Anna Lloyd testified at trial that when the plane finally came to rest, "our seats had stacked on top of each other like dominoes. In order to get up, I had to lift the seat up that was on top of me." TR. 343. Because she was seated in the next-to-last row at the back of the plane, she headed toward the rear exit. The flight attendant sent her, and other passengers who had gone to the rear of the plane, back the other direction, to the front of the plane:

> A: I didn't even make it back to my seat before I was met with the smoke of the airplane. And it was thick, crushing black smoke. And I got down on the ground, and I pulled my dress over my face, over my nose and my mouth. And I went back to the rear because I knew I couldn't make it out the other way. TR. 344.
>
> Q: Was there very little air there that was without smoke?
>
> A: Back towards the back in the exit place there was a gap. And there was a little bit of fresh air back there, but not enough for all of us.

Q: Were people crowding and pushing to get back there to that little bit of air?

A: Panic had really set in. And everyone wanted off that airplane. They were pushing. Some men were jumping on the door trying to get it to open. He did. They got it open. And the stewardess was the first one out. TR. 345.

Q: Anna, did you finally get to that opening where the stewardess had left?

A: Yes, sir, I did.

Q: What did you do, and how did you try to get out?

A: I turned sideways, and I crouched down. And I squeezed through the opening. I immediately fell about five or six feet into mud and rocks and nastiness. TR. 346.

The plaintiff also testified that when the seats "dominoed," they "had come out of the bolt on the floor. One of the bolt-holding things stabbed me in my leg." TR.349. The plaintiff was taken to Arkansas Children's Hospital, where she was treated for pain to her knee, leg, and ankle; she was given oxygen and released. Dr. Wesley Kluck's medical records regarding Anna Lloyd indicate that the plaintiff was later diagnosed with traumatic quadriceps tendinitis caused by airplane seats falling on top of her knees while they were flexed. Plaintiff's Exhibit 7.

Appendix

On direct examination, the plaintiff's psychiatrist, Dr. Stewart Harris, testified as follows:

> Q: Do you have an opinion, Dr. Harris, of whether or not the injury to Anna Lloyd's knee that you described that occurred in the crash is a part of her posttraumatic stress disorder that she suffers from?
>
> A: Yes, it's a factor, because it literally made her feel even more vulnerable when something injures one's body in the context of this horrible experience. So it is a factor.
>
> Q: Do you have an opinion, Dr. Harris, whether or not the crash caused an injury to Anna Lloyd's brain as a result of this crash?
>
> A: Well, the crash and the experience created the posttraumatic stress disorder and the major depressive disorder, which are manifestations of brain dysfunction, of brain abnormalities, and in that sense damage. As I explained yesterday, it's not damage like a bullet or a stroke, but it's damage to the function of the brain. TR. 425.

On cross examination, defendant's counsel elicited the following from Dr. Harris:

> A: Right. Having your body damaged, for almost anyone, there's a significant injury, it increases a sense of vulnerability. Her body was damaged, both her knee and then — in her words, I think was she was stabbed by the seats' supports. TR. 470.

Appendix

Defendant contends that the plaintiff's contention of connection between her physical and psychological injuries is defeated by Dr. Harris's testimony that she probably would have suffered PTSD with or without the knee injury:

> Q: In your opinion, if she had not injured her knee, would she still have had the PTSD?
>
> A: Yes. I think it was so horrible on that flight, she thought she was going to die, I think she would have had it without the knee injury. TR. 470.
>
> . . . .
>
> Q: Thank you. And are you telling me that if a person injures her knee, they're going to develop PTSD?
>
> A: I'm sorry?
>
> Q: I'm sorry, too.
>
> A: Excuse me.
>
> Q: People injure knees all the time and don't get PTSD?
>
> A: Absolutely.
>
> Q: In Anna's case, certainly you don't believe that the knee injury was the cause of her PTSD?
>
> A: I think it was part of the whole picture. She — the plane apparently was going down the

runway, out of control, from what she and the other members of that flight have told me, sideways, sliding down the runway, and then apparently went over some sort of hump at the end of the runway where they were airborne sideways, or partially sideways before they hit the light thing, and then that snapped the seats up, which injured her physically. That was all part of that – all that process. I mean, how can you separate the knee from the horror of thinking you're going to be burned to death. I mean, it's all part of the same process. TR. 470-71.

. . . .

Q: But I think you told me earlier, even if she hadn't injured her knee, you believe that the psychological trauma of going through the accident would have caused the PTSD?

A: I think she would have had PTSD without the knee accident, or the knee injury — I'm sorry — and without the injury to her calf. I think she would have had it because of the — of what she went through emotionally on the airplane. TR. 472

The problem with the defendant's thesis is that the knee and calf injuries, the smoke inhalation, were all part of a terrifying accident which led to the plaintiff's PTSD. The uncontradicted testimony in this case is that the physical injuries were *a* proximate cause of the plaintiff's PTSD. The nexus is established, and there is nothing to support a holding

that the physical injury be the *only* cause of psychological and mental injury. If that were the rule, no one surviving a serious air disaster could ever chin that pole.

In any event, Dr. Harris was not asked whether the plaintiff would have suffered PTSD absent the thick black smoke filling her lungs, absent the plane's hitting an object with such force that her seat and those in front and behind her were ripped from their moorings, absent the scrapes and bruises associated with squeezing through a small opening to escape from the flaming wreckage. Those were the physical injuries suffered by the plaintiff in this case.

C. Is post-traumatic stress disorder as a physical manifestation of injury?

Even if the plaintiff had not proved a connection between her physical injuries and her mental injuries, there was evidence in the record that PTSD, itself, constitutes a physical manifestation of injury. Dr. Harris testified that PTSD is a "physical injury." TR. 426. On cross examination, the defendant's counsel delved into the question of the physical manifestations of PTSD:

> Q: Now, are you telling us that in every case, in your opinion, that in every case of posttraumatic stress disorder that's chronic, that there would be objective evidence with these test, with the hormone test, that would demonstrate objectively that there is brain dysfunction?
>
> A: Well, the researchers have shown brain dysfunction in people who have chronic PTSD.

Appendix

> I brought a sheath of abstracts I got from the National Library of Medicine [Plaintiff's Exhibit A] demonstrating lots of different abnormalities of function in chronic PTSD. When you say, would every person demonstrate it, would every person demonstrate the same abnormality? Probably not. Not the same abnormality. But people are different. Their biological makeup is different, so they react differently. *But the consistent theme is that this is both a biological and psychological syndrome. It is not just psychological.* TR 437 (Emphasis added).
>
> . . . .
>
> Q: As I understand your opinion then, with Anna Lloyd's brain dysfunction, that because her PTSD has been chronic, that you necessarily relate that she must have brain dysfunction therefor?
>
> A: Yes, because of all the research findings that show it.
> TR 438

In *Weaver v. Delta Airlines, Inc.*, 56 F. Supp. 2d 1190 (D.Mt. 1999), the district court found that PTSD constitutes a physical injury and a physical manifestation of injury. As with the case before this Court, "[Plaintiff relied] on recent scientific research explaining that post-traumatic stress disorder evidences actual trauma to the brain cell structures. [Plaintiff's] post-traumatic stress disorder evidences an injury to her brain and the only reasonable conclusion is that it is, in fact, a bodily injury." *Weaver* at 1192. In *Weaver*, the plaintiff's PTSD was her only physical injury.

Appendix

Through Dr. Harris, the plaintiff introduced articles explaining the physical and biological aspects of PTSD. (Plaintiff's Exhibit A.) These scientific articles provide sufficient cause to find that chronic PTSD causes biological, physical changes in brain function.

The Court of Appeals for the Third Circuit, in *Terrafranca v. Virgin Atlantic Airway, Ltd.*, 151 F.3d 108 (3d Cir. 1998), held that there could not be recovery unless a Warsaw passenger demonstrated direct, concrete bodily injury as opposed to mere manifestations of fear or anxiety. In that case, the plaintiff alleged that she suffered PTSD, along with anorexia, which resulted in her losing seventeen pounds. The distinction, however, is that the plaintiff in *Terrafranca* apparently did not allege that PTSD was a physical manifestation of injury. Instead, she relied on her loss of weight as the physical manifestation of injury. Another important distinction was that there was no crash of the aircraft in *Terrafranca*. The passengers were told that there had been a bomb threat against the plane, and receiving the news of the bomb threat was the triggering event for the plaintiff's PTSD.

Likewise, in *Jack v. Transworld Airlines*, 854 F.Supp. 654 (N.D. Cal. 1994), noted *supra*, the district court held that symptoms such as sleep problems and anxiety were not sufficient to constitute a physical manifestation of injury. The *Jack* court suggested that a heart attack or skin rash would qualify as physical manifestations of injury.

Appendix

The *Terrafranca* and *Jack* decisions reflect our nascent understanding of the nature of mental illness. It is not clear that those courts were presented with the scientific literature to underpin a finding that PTSD is a biological as well as an emotional and psychological illness.

Conclusion

This is not a case where the plaintiff pinched her little finger in her tray table. This is a case where there were real physical and mental damages. Even though any physical injury should permit a plaintiff to cross the liability threshold and access all available remedies in Warsaw cases, in this case the plaintiff's injuries were a proximate cause of her mental injuries. Furthermore, the evidence presented at trial, both in the form of expert testimony and exhibits, established that PTSD is a biological/physical as well as a psychological injury. Accordingly, judgment will be entered on the jury's verdict.

DATED this 27th day of October, 2000.

HENRY WOODS
UNITED STATES DISTRICT JUDGE